



CHESAPEAKE BAY COMMISSION

Policy for the Bay • www.chesbay.us

CHESAPEAKE BAY BLUE CRABS AND OYSTERS RESTORATION GOALS AND STATUS

BLUE CRABS¹

With the 2014 *Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program partners committed to two goals related to blue crabs. The partnership pledged to 1) maintain a sustainable blue crab population based on the target of 215 million adult females and 2) to manage for a stable and productive crab fishery including working with the industry, recreational crabbers and other stakeholders to improve commercial and recreational harvest accountability.

Each year, scientists use the winter dredge survey to measure the Chesapeake Bay's blue crab population. Maryland and Virginia scientists visit 1,500 sites over the course of three and a half months, in an effort to estimate the population of crabs over-wintering in the mud. This year's survey presents both good and bad news. According to the survey estimates, the total abundance of crabs (males and females of *all* ages) decreased from 553 million in 2016 to 455 million crabs in 2017. Adult females increased by 30%; 194 million in 2016 to 254 million in 2017. This abundance of adult female blue crabs is above the restoration target of 215 million adult female blue crabs. However, juvenile crab abundance decreased by 54% in 2017 and is among the five lowest estimates since 1990. Adult males decreased by 16.5%.

The Chesapeake Bay Stock Assessment Committee (CBSAC) recommended that Virginia and Maryland maintain a cautious, risk-averse approach to the 2017 blue crab harvest season and consider scaling back the fall fishery to protect juvenile crabs to ensure a future breeding year class.

OYSTERS²

With the 2014 *Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program partners committed to two goals related to oysters. The partnership pledged to 1) continually increase finfish and shellfish habitat and water quality benefits from restored oyster populations and 2) restore native oyster habitat and populations in 10 tributaries by 2025 and ensure their protection.

Six tributaries have been selected for oyster restoration: Harris Creek and the Little Choptank and Tred Avon rivers in Maryland, and the Lafayette, Lynnhaven and Piankatank rivers in Virginia. Each tributary is at a different level of progress in a process that involves developing a tributary restoration plan, constructing and seeding reefs, and monitoring and evaluating restored reefs.

In late 2016, the Chesapeake Bay Program partnership approved the recommendations of the Oyster BMP Expert Panel to allow several private oyster aquaculture practices to serve as best management practices for the reduction of nitrogen and phosphorus. The experts developed

¹ Sources: Chesapeake Bay Program and 2017 Chesapeake Bay Blue Crab Advisory Report.

² Sources: Chesapeake Bay Program and the "Oyster BMP Expert Panel First Report—Approved on December 19, 2016."

default reduction effectiveness estimates for nitrogen and phosphorus assimilation in oyster tissue.

In Maryland, a just-released [NOAA report](#) explored restoration conditions three years after planting, primarily in Harris Creek. Oyster population density and biomass met the criteria for success at nearly all sites and overall exceeded the restoration goal of 50 oysters/m³ for the bars. Most impressively, the numerous sites that used stone as a base substrate had densities about four times greater than the sites that used shell. About half of these oysters were recruits that set on the stone rather than hatchery reared spat. This is important since there is a dwindling supply of shell available for placement on reefs for either the wild fishery or sanctuaries.

In Virginia, restoration work on the Lafayette River is almost complete. For the Piankatank River, preliminary reports, based on VMRC and VIMS oyster stock assessment data, indicate that large portions of the area targeted for restoration are meeting or exceeding restoration goals. Overall restoration goals are currently being finalized for the Piankatank and Lynnhaven Rivers.

Both Virginia and Maryland are actively working to identify the remaining four restoration tributaries, two in each state. In Maryland, the Oyster Advisory Committee is offering its advice to the Secretary of DNR who is expected to make his recommendation by year's end. At the Virginia Interagency Oyster Team meeting in August, the team recommended selection of the Lower York and Great Wicomico as the final two targeted tributaries. There was also consensus among the Team members that selection of the two targeted tributaries should not impact continued restoration efforts in other tributaries such as the Elizabeth River.